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EXAMINER

NGUYEN, TRAN N

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 01/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary**Application No.**

09/978,049

Applicant(s)

HUNTER, JOHN C.

Examiner

Tran N. Nguyen

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) 3-22 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following must be shown:

- (1) A plurality of secondary brushes and a pair of primary brushes;
- (2) Means for constant electrically connecting the individual field coils with a source of electrical power under charge conditions;
- (3) Means for selective intermittent electrically connection of the individual field coils with a source of electrical power under motor drive conditions;
- (4) A computer controlling the flywheel under load and charge conditions.

These claims features must be shown or the features should be canceled from the claims. No new matter should be entered.

NOTE: in order to clearly and completely illustrate the flywheel-battery-and-motor device's components and their structural assemblies, as a whole structure, the applicant is hereby suggested/requested to submit at least one additional drawing of an **exploded view** of the flywheel battery and motor (see attachment for samples of an exploded view illustrated a device's components and their structural assemblies).

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 1-22 are objected to because of the following formalities:

Among claims 1-22, “rotor windings”, “field windings” (plural form) , “rotor winding”, “field winding” (singular form) should be changed to respective ***“rotor coils or rotor coil”***, ***“field coils or field coil”*** for clearly establishing antecedent basis of the recited subject matters.

Note: The applicant is advised to check for clear antecedent basis of all the recited subject matters in the independent claim and dependent claims therefrom.

In claim 1, lines 42 and 47, “whereby” *should be changed to “wherein”* or simply delete the term, since It has been hold that the functional “whereby” statement does not define any structure and accordingly can not serve to distinguish. *In re Mason, 114 USPQ 127, 44 CCPA 937 (1957)*.

In claim 11, lines 2-3, change “ring so size and configured as to support” *should be changed to “ring being configured with a predetermined dimension for supporting”*.

In claim 12, line 3, change “each set at and angle so as to leave space therebetween so as to form a fan” *should be changed to “ wherein each of said triangular ring support members being arranged and angled to constitute a space therebetween in order to form a fan”*.

In claim 17, line 2, change “notch so configured as to conform” *should be changed to “notch being configured with a predetermine dimension so that said mounting notch conforms”*.

This application is in condition for allowance except for the aforementioned formal matters. The applicant is advised to incorporate the suggestions in the claimed language to clarify the claims' recitations.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Allowable Subject Matter

Claims 3-22 are allowed.

Reason for Allowability

The following is an examiner's statement of reasons for allowance: the primary reason for the allowance is the novelty and the inventive steps of a flywheel-battery-and-motor device, *exactly as recited in claims 3-22*, generally the device having the following components:

- A horizontally disposed cylindrical housing;
- A horizontally disposed flywheel in the housing;
- A circular battery located about the periphery of the flywheel;
- A plurality of electromagnetic rotor coils mounted therein;
- A first and second respective pluralities of electromagnetic field coils mounted therein;
- A plurality of secondary brushes to corresponding to the respective individual rotor coils;
- A pair of primary brushes to corresponding to the positive and negative poles of the battery;

Wherein under a condition of load, a computer directs a constant flow of electricity from the battery through the primary brushes to a selected number of rotor coils and intermittent flow of the electricity to the field coils so that the device functionally acts as a drive motor; when under the condition of charging, the computer directs a constant flow of electricity to the rotor coils, and the computer receives a constant flow of electricity from the field coils, which is conducted to the battery through one of the primary brushes for charging the battery.

In other words, the flywheel-battery-and-motor device, for use in flywheel battery electric vehicle, of the present invention is configured with A computer controls flow of constant power supply from a battery (36) to selected number of rotor windings (50) during loading conditions. The computer receives constant power from field coils in drive motor, to charge battery during charging condition. The flywheel-battery-and-motor device capable of maintaining the constant high-speed rotation of rotor by using computerized control system during load conditions and providing maximum torque at a preferred time.

Comparing to the prior-art of the record, none of the prior art references of the record, either stand-alone or in combination, has taught or suggest the above-mentioned features in combination with other limitations recited in the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tran Nguyen whose telephone number is (703) 308-1639.

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Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 308-1782. The fax phone number for this Group is (703) 305-3431 (32).



TRAN NGUYEN
PRIMARY PATENT EXAMINER
TC-2800